Tributary Tribune

Service Year 21
District C, 2015
Volume 21, Issue 3

Members from District C at WSP Orientation – October 2014

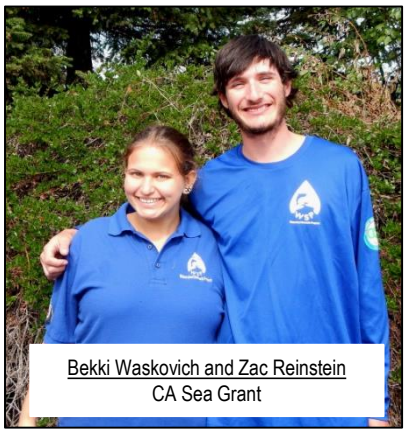
Stories and Art by the Members of the Watershed Stewards Program

The Watershed Stewards Program's (WSP) mission is to conserve, restore, and enhance anadromous watersheds for future generations by linking education with high quality scientific practices.

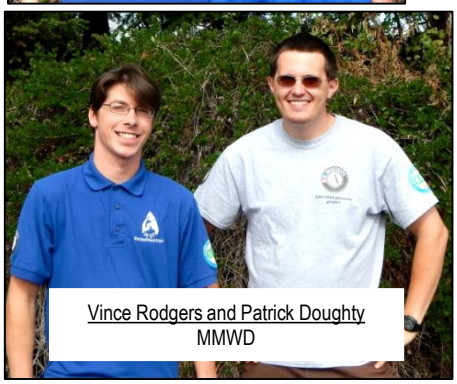
A program of the California Conservation Corps, WSP is one of the most productive programs for future employment in natural resources. WSP is administered by CaliforniaVolunteers and sponsored by the Corporation for National and Community Service.

Site Partners from Region II-C

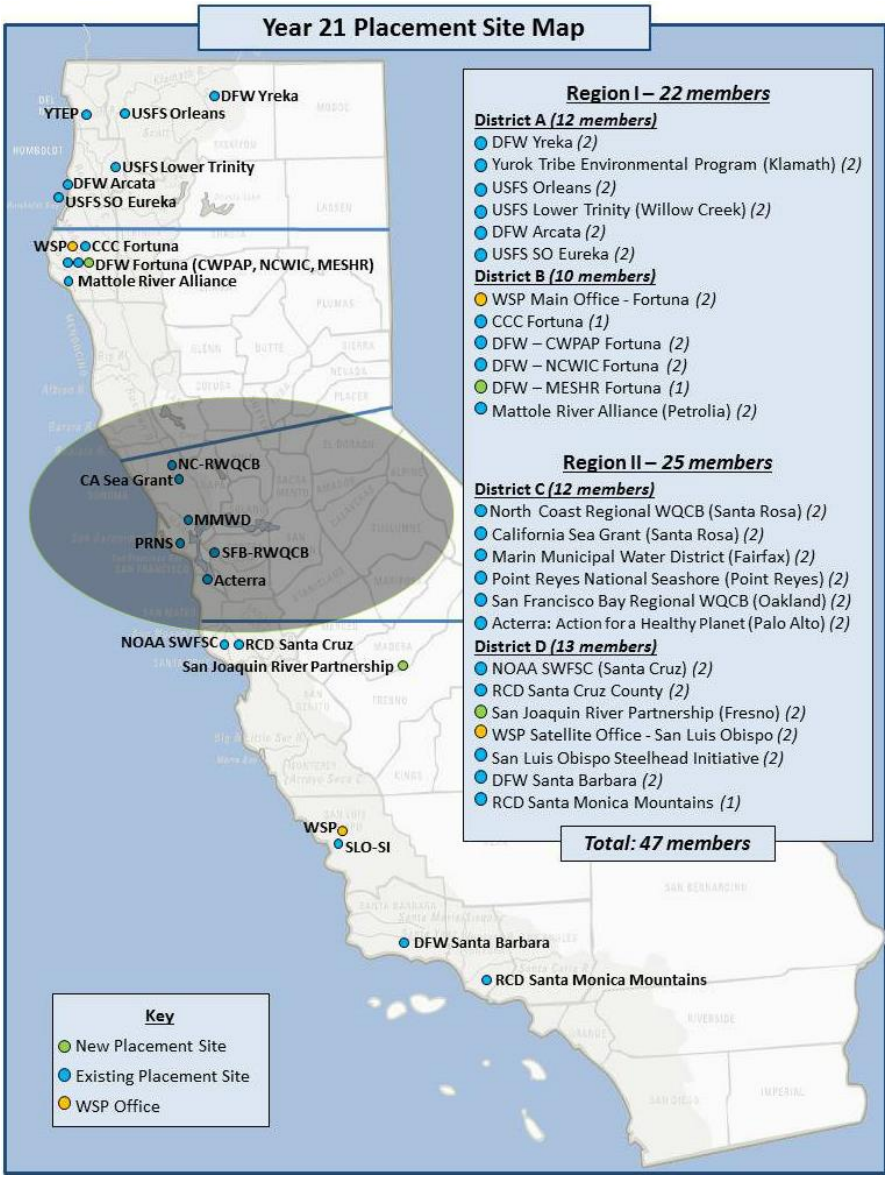
Brandon Stevens and Lance Le
NC-RWQCB



Bekki Waskovich and Zac Reinstein
CA Sea Grant



Vince Rodgers and Patrick Doughty
MMWD



Sara Anzalone and Katrina Valesco
PRNS

Rebecca Nordenholt and Corie Hlavaty
SFB-RWQCB

Jeremy Merckling and Jade Burr
Acterra

The Tributary Tribune showcases the adventures, insights, and art of Members of the AmeriCorps Watershed Stewards. For twenty-one years WSP has been serving communities throughout California watersheds. This issue features articles and artwork by members from Region II-C which extends from Palo Alto to Santa Rosa, CA.

Watershed Day at the Capitol

Jeremy (Acterra), Sara (PRNS), Jennifer (Program Manager), Rebecca (SFBRWQCB), Corie (SFBRWQCB), Jade (Acterra), Stephanie (Member Coordinator) and Katrina (PRNS) outside the Capitol Building.

By: Corie Hlavaty
Placed at SFB-RWQCB

On April 29th, six WSP members had the opportunity to visit Sacramento to attend Watershed Day at the Capitol. Watershed Day provides an opportunity to collaborate with other watershed professionals, discuss the political future of watershed restoration, and meet with Legislators to promote watershed protection. Members from Acterra, Point Reyes National Seashore, and the San Francisco Bay Regional Water Quality Control Board, along with WSP's Program Manager and Member Coordinator, were in attendance. The morning started in the CalEPA building to meet with the California Watershed Network, a non-profit that works to coordinate a network of community-based watershed management. The group met with other watershed professionals, engineers, educators, and politicians throughout the day.

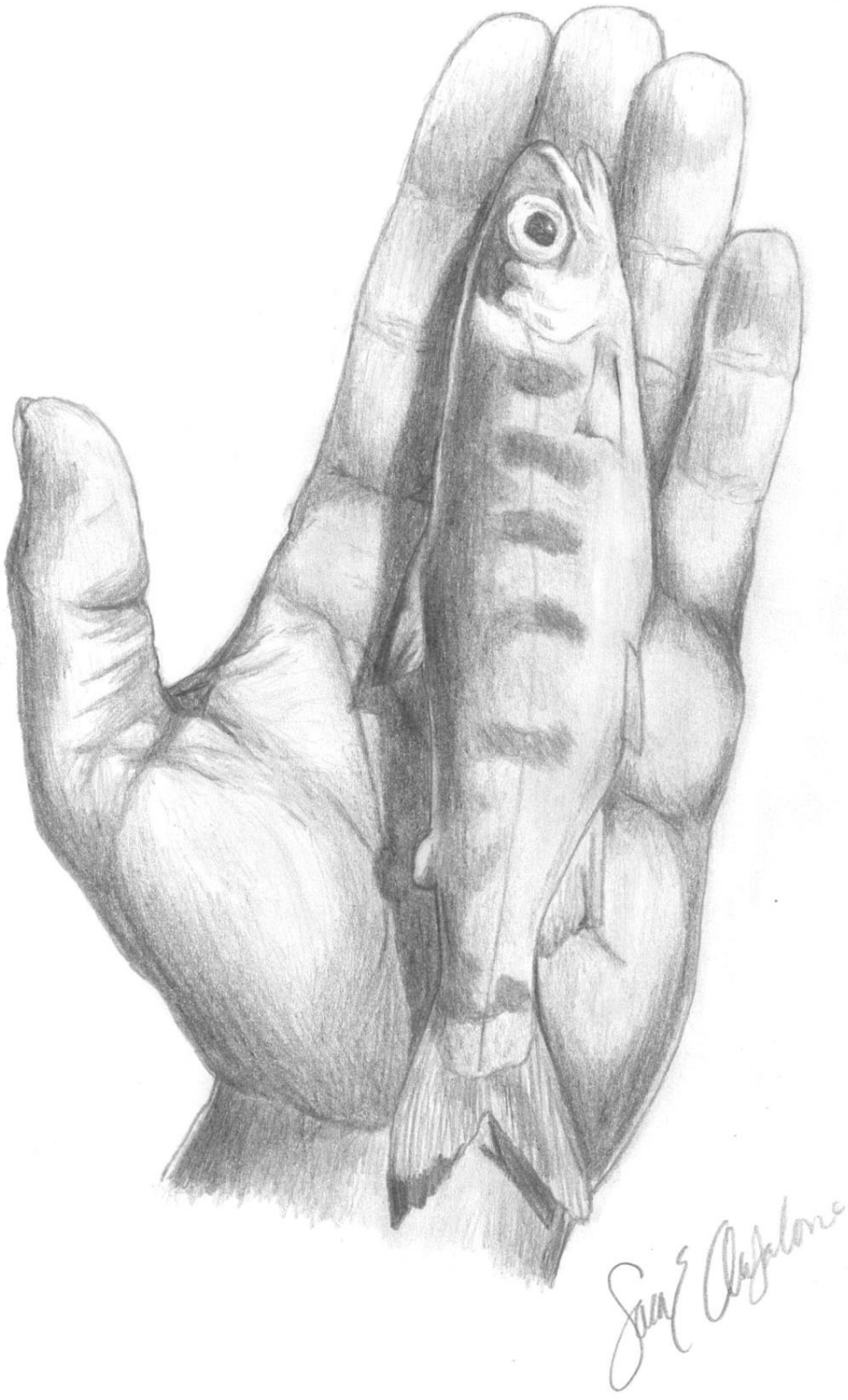
In the afternoon, they split into two groups and met with four different legislators and legislator assistants. Each legislator represented different sectors, Senator Mike McGuire (North Coast), Assemblyman Jim Wood (North Coast), Senator Lois Wolk (Central Valley), and Assemblyman Katcho Achadjian (San Luis Obispo). They spoke with them about WSPs placement sites and the opportunities Members have been given during their WSP term. Environmental education was a key component in the morning discussion; emphasized the WOW! program. Katrina and Sara explained their teaching experience in small, rural towns while Corie and Rebecca stressed the importance of watershed education in urban areas, and how it has been an eye-opening experience for a lot of their students. Jade and Jeremy from Acterra shared a their experience in implementing the first rain garden in Menlo Park, a garden full of native, water-loving plants that will save 13,000 gallons of water a year. They saw the Assembly Chambers, perform cold-calls with other legislators, and met some WSP alumni who were advocating for their current passions. Overall, it was a successful day at the Capitol for Watershed Stewards Program members!

By: Jade Burr
Placed at PRNS

Later in the day Corie, Katrina, Jennifer and I met with Senator Mike McGuire. As one of Northern California's youngest school board presidents, he aspired and achieved success at an early age despite his personal hardships growing up with a single mom in a poor neighborhood. Senator McGuire gave us valuable advice about pursuing our career. He urged us not to take "no" for an answer and to always be the hardest working person in the room. It was an incredible experience listening to his personal journey and the obstacles he had to overcome to get to where he is today.

Members with Senator McGuire, who represents most WSP sites in Regions I and II.

As young professionals in the environmental field, it sometimes feels like an uphill battle trying to make the world a better place but it is important to remember that it can and *needs* to be done. Leaving the conference, I felt inspired by the impact we have made as part of the Watershed Stewards Program and excited for the bright future ahead of all of us.



WSP members at Acterra: restoration in an urban setting

Jeremy Merckling
Placed at Acterra

Native Western Bluebird spotted at McClellan Ranch.

Native Slender salamander found by one of our volunteers at the San Francisquito field site.

Native Buckeye butterfly on a mulched part of the field at McClellan Ranch.

The Myths of Restoration Ecology

Zac Reinstein
Placed at CA Sea Grants

Robert Hilderbrand, Adam Watts, and April Randle discuss a series of myths that lie between the scientific community and the general public. Although each category of myths contains some truth, the authors hoped bringing light to their falseness would help improve future restoration projects and media relations.

(1) Carbon Copy- The idea that all ecosystems are the same with predictable community assembly.

(2) Field of Dreams- The notion that all one needs is the physical structure of an ecosystem and the biotic community will appear. "If you build it, they will come".

(3) Fast Forward- A belief that one can accelerate ecosystem development by controlling pathways.

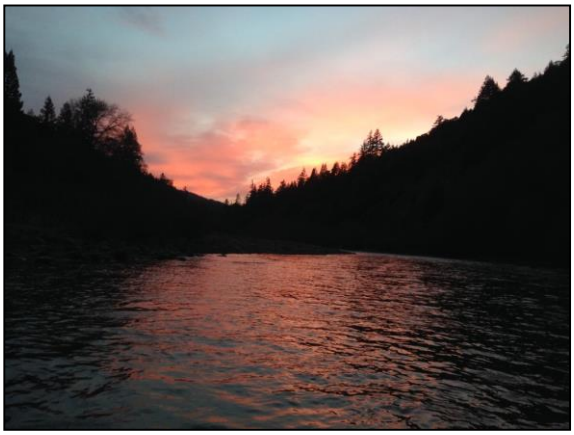
(4) Cookbook- Restoration success comes from a standardized list of techniques and 'recipes' that work in every ecosystem.

(5) Command and Control: Sisyphus Complex- The idea that nature is controllable, and treating symptoms will fix the problem. These myths are present in daily life and ecologist must overcome them at every project.

(6) Bionic World- A societal belief that all of the pressing issues we face, and will continue to meet, can be solved solely by science and technology.

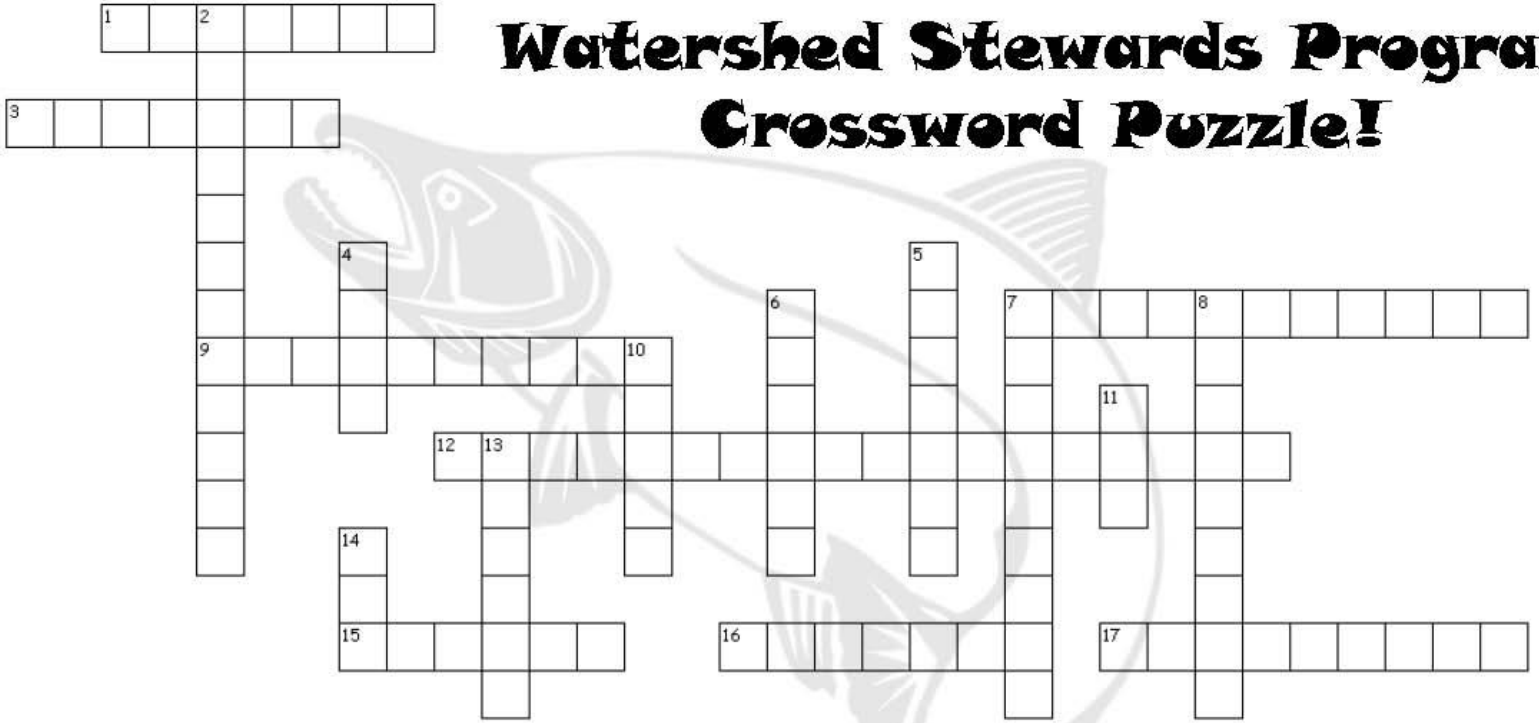
Hilderbrand, R. H., A. C. Watts, and A. M. Randle 2005. The myths of restoration ecology.
Ecology and Society **10**(1): 19. [online] URL:
http://www.ecologyandsociety.org/vol10/iss1/art19/

Native Common checkered skipper at McClellan Ranch.



South Fork Eel River. January 2015. No need for filters.

Watershed Stewards Program Crossword Puzzle!



Across

1. A small, rayless, fleshy dorsal fin present in certain fishes, notably in the salmon family. (Usually clipped to differentiate hatchery fish from wild fish)
3. A water-bearing stratum of permeable rock, sand, or gravel
7. Taxonomic species name for chinook salmon
9. Born in fresh water, spends most of its life in the sea and returns to fresh water to spawn
12. Organisms without backbones, which are visible to the eye without the aid of a microscope (caddisflies, stoneflies, etc.)
15. Taxonomic species name for steelhead
16. The current state of California's water supply
17. Gill cover

Down

2. The process by which water on the ground surface enters the soil
4. A spawning nest made by a fish, especially a salmon or trout.
5. Taxonomic species name for coho salmon
6. To examine and record the area and features of (an area of land) so as to construct a map, plan, or description
7. A measure of water clarity how much the material suspended in water decreases the passage of light through the water
8. A region or area bounded peripherally by a divide and draining ultimately to a particular watercourse or body of water
10. A young salmon (or trout) after the parr stage, when it becomes silvery and migrates to the sea for the first time
11. A program requirement. Member-led volunteer project that helps restore a watershed
13. Second stage of salmonid development
14. A barrier constructed to hold back water and raise its level, the resulting reservoir being used in the generation of electricity or as a water supply

Brandon Stevens
Placed at NC-RWQCB

A redwood forest in California
Lance Le: Placed at NC-RWQCB

What visions I receive
from you, Aldo Leopold,
when I crawl through huckleberry
tunnels, sweating
in nylon uniform, looking up to ancient
giants,
their crimson cores splayed open in
split burls.

What outcrops show!
The soft soil above: so
easily do they erode away, especially
in barren clearings.
Would the land groan, I am sure you
can hear—her
aged children gone, replaced by
compromise and shear.

I sense John Muir in
Falk, wandering in life and
ghost, haunting gone a town of
explorers and exploiters.
Quite different from his eponymous
park, this old growth is
a dense jungle, teeming of paths
disappeared or never here.

I wander until lost, my
mind shifting from green
screens to the steep ridge ahead; it
crosses abandoned
roads, exposing cuts into the land's
skin. So many roots,
so many tunnels! They find their exit in
mass wasting.

Why was I there? The
purpose at this point muddy,
the woods were the place my delirium
became euphoria.
What conversations you must have,
Aldo Leopold, with
Aristotle and Hiawatha while waiting
outside the pearly gates.

The Hardest Part.
Bekki Waskovich: Placed at CA Sea Grants

If someone asked me what the hardest part WSP was, I might have said something along the lines of long days, little pay, etc. March 26th was the actual realization of the hardest part of my service.

It isn't the hiking, wearing a backpack full of gear, climbing over log jams, in 80 degree temperatures all in waders or finding leaks in waders. No.

It isn't going over all the data and making sure it's all entered correctly and all the programming that goes into making data collection run smoothly. No.

I saw the hardest part of my job and honestly, it was almost too much.
That day I saw a stream disconnected with various small pools full of yoy, smolts, and adults.

I saw the face of no hope.

I saw so many tiny fish gasping, what, for some, would be their last breath.
I saw small pools filled with hundreds of young fish with nowhere to go, a pool that would soon dry out, soon fall prey to birds, raccoons, or whatever else happened to notice. In a stream with little to no cover, no refuge, and already 80 degree weather.

It gave me such a stunning realization that I honestly don't think before this moment I could actually voice.

This is why I do what I do. This is why I work long days, I accept little pay, I spend the time hiking, sweating, dehydrated, going over data, inspecting every number, I do it because these fish are still trying. Their efforts are an inspiration to myself and I'm sure to many others as well.

My WSP term will have good days, it will have bad days, but knowing that so many species are headed to extinction and literally looking that in the face **that** will always be the hardest part of my service.

Andrew Bresee
Member placed at WSP – SLO Satellite Office

The Watershed Stewards Program is 'Worth a Dam'

Rebecca Nordenholt
San Francisco Bay Regional Water Quality Control Board

Located along the Sacramento and San Joaquin Rivers, Martinez, California boasts John Muir and Joe DiMaggio as former residents. In 2007 the city gained two new celebrities when a pair of beavers decided to call Martinez home. Beavers are a keystone species and their presence is beneficial for numerous wildlife species, including salmonids. The beavers settled on the Alhambra Creek and built a dam which was quickly deemed a flooding hazard. The city wanted to remove the beavers, but outcry at a public meeting drove them to reconsider

Rebecca Nordenholt installing a willow stake

Skip Lisle, President and Chief Scientist of Beaver Deceivers International, was hired to create and install a flow device that moves water downstream without the beavers noticing, keeping the city safe from flooding without displacing the beavers. It seemed like a happy ending for everyone. Everyone except the riparian vegetation, that is. Over the years the growing beaver family built numerous dams and the riparian trees couldn't replace themselves as fast as the beavers could chew.

Heidi Perryman, President and founder of 'Worth a Dam', set up a meeting with a City Engineer to discuss planting trees along Alhambra Creek. Having faced opposition from the city in the past, she asked us to attend the meeting in support of the project. The engineer asked a couple questions about the project, WSP, and our work at the Water Board. A mere fifteen minutes later the meeting was over. The engineer would have to run it by the Council, but he expected we'd be able to begin planting in two weeks. After the meeting Heidi was in shock. She couldn't believe how quickly the engineer approved our plan and credited our position as Watershed Stewards with the Water Board as the driving force behind our success. A few weeks later we harvested plant material and on March 27th, Ann Riley from the Water Board and several 'Worth a Dam' volunteers helped us plant fifty willow and poplar stakes. Our work attracted a lot of attention from the community; ABC7 News even showed up and the story aired on the six o'clock news.

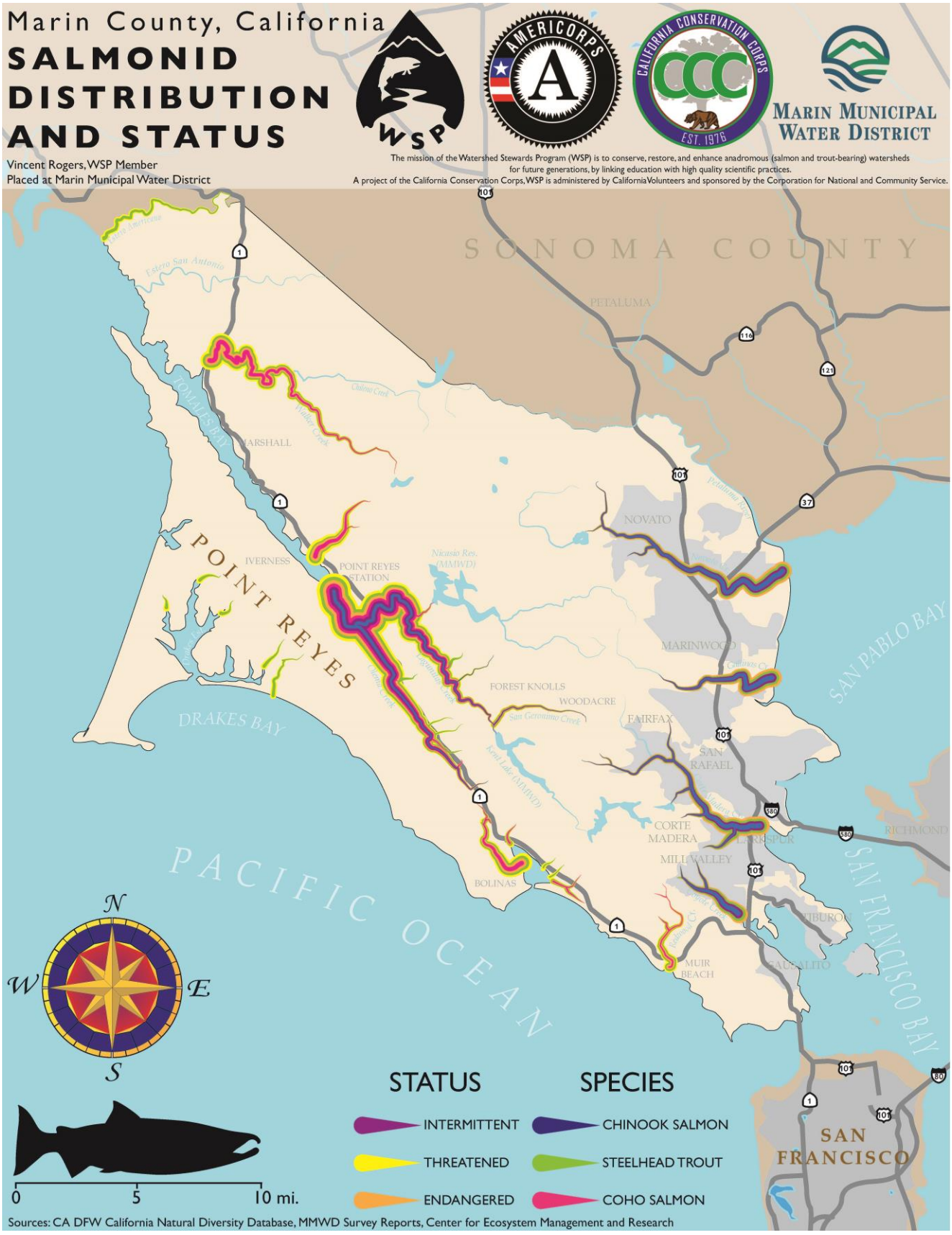
Afterwards Heidi's husband Jon wrapped the stakes with wire cages to keep them safe from hungry beavers. As they grow the stakes will help stabilize the banks, keep the water shaded, and provide habitat for wildlife and tasty snacks for the beavers. It seems like another happy ending for the Martinez beavers.

Stepping into Class

Katrina Velasco
Placed at PRNS

WSP Members Sara Anzalone (right) and Katrina Velasco (left).

WSP's *Wonders of Watershed* (*WOW!*) Education Program gives Members not only an opportunity to enlighten students about watersheds and salmonids, but also a chance to gain a greater understanding of their placement site's community. Members placed at Point Reyes National Seashore have the opportunity to work with any of the 5 schools within Shoreline Unified. For Shoreline Unified School District's 2014-2015 academic year, *WOW!* was presented to K-1st grade students at Inverness Elementary and 2nd-3rd and 7th grade students at West Marin Elementary. The youth at Shoreline Unified School District come from diverse backgrounds and have parents that work as fishermen, ranchers, workers and owners of locally-owned businesses, or employees of the National Park Service. This mix added some interesting dynamics to classroom input during *WOW!* lessons. From learning about their local watersheds (Lagunitas and Olema) to going on field trips to these local watersheds to examining fish anatomy during salmon dissections, one could really see the students engaged enthusiasm. *WOW!* has definitely planted a seed into these young and great minds about the importance of their watersheds and the salmonids that they contain.


Marin County, California
SALMONID DISTRIBUTION AND STATUS
Vincent Rogers, WSP Member
Placed at Marin Municipal Water District
WSP
AMERICORPS
CALIFORNIA CONSERVATION CORPS
CCC
EST. 1976
MARIN MUNICIPAL WATER DISTRICT
The mission of the Watershed Stewards Program (WSP) is to conserve, restore, and enhance anadromous (salmon and trout-bearing) watersheds for future generations, by linking education with high quality scientific practices.
A project of the California Conservation Corps, WSP is administered by CaliforniaVolunteers and sponsored by the Corporation for National and Community Service.
SONOMA COUNTY
PETALUMA
NOVATO
MARSHALL
POINT REYES
POINT REYES STATION
IVERNESS
DRAKES BAY
FOREST KNOLLS
WOODACRE
FAIRFAX
SAN RAFAEL
CORTE MADERA
LARKSPUR
MILL VALLEY
BOLINAS
MUIR BEACH
SAUSALITO
TIBURON
RICHMOND
SAN PABLO BAY
SAN FRANCISCO BAY
SAN FRANCISCO
PACIFIC OCEAN
Nicasio Res. (MMWD)
Kent Lake (MMWD)
N
W
E
S
0
5
10 mi.
STATUS
INTERMITTENT
THREATENED
ENDANGERED
SPECIES
CHINOOK SALMON
STEELHEAD TROUT
COHO SALMON
Sources: CA DFW California Natural Diversity Database, MMWD Survey Reports, Center for Ecosystem Management and Research

Alumni Highlight: Meiling Roddam

Meiling Roddam is a WSP Alumna that served in 2010 (Year 16) with the California Department of Fish and Wildlife (CDFW) in Yreka. During the interview she spoke about her time in WSP, and how it changed the course of her life.

Before WSP, Roddam graduated from U.C. Santa Cruz with a B.S. in Marine Biology. She was working in an Oceanography Lab when she heard about WSP. At the time she had no experience in fisheries and had never even swam in a river. She was initially not accepted into WSP, but overlooked this as she was not passionate about fisheries at the time. Fortunately, she was called back later that year and offered the position. Roddam enthusiastically accepted and jumped into the rivers that epitomize WSP, fisheries, and salmon sciences. She was a long way from the urban beaches of her native Los Angeles.

During her time with WSP, Roddam participated in a variety of tasks and collected valuable data in an environment she never expected to be in. She learned a great deal, and gained a lot of experience in the field. The work inspired Roddam and led her to seek a fisheries related career after her term with WSP.

Today Roddam is a Biological Technician, and works with the West Coast Region of NOAA Fisheries in the Water Operations and Delta Consultations Branch. Roddam's manages the pumps that direct water to California's Southern Central Valley. These pumps are the primary source of water for these regions. They are so powerful, when turned on, the rivers literally run backwards and move several thousand cubic feet of water per second. NOAA Fisheries issued a biological opinion stating that these water operations were threatening salmon and steelhead species (Rodney 2009). Roddam monitors fish in rivers such as the Sacramento, American, and Stanislaus to ensure they are protected and the pumping operations are in line with NOAA policies.

Throughout the interview, Meiling eagerly described how WSP changed the course of her life and was the catalyst that launched her into a world she now cares deeply about. Roddam transitioned from working in a lab she was not passionate about, to excitedly collecting data in the field with WSP. After WSP, she progressed to analyzing and reporting on large quantities of fishery data gathered by dozens of people all around the state.

The End!